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IBM CORP (YA)
C/O YEE & ASSOCIATES PC
P.O. BOX 802333
DALLAS, TX 75380

EXAMINER	
AILES, BENJAMIN A	
ART UNIT	**PAPER NUMBER**
2142	

NOTIFICATION DATE	DELIVERY MODE
03/05/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeeiplaw.com

Office Action Summary	Application No.	Applicant(s)	
	09/965,014	VICKNAIR ET AL.	
	Examiner	Art Unit	
	BENJAMIN A. AILES	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-10,12-18 and 20-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-10,12-18 and 20-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to correspondence filed 18 December 2007.

2. Claims 1-2, 4-10, 12-18 and 20-29 remain pending.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). With respect to claims 9, 10, 12-16 and 28, specifically, regarding independent claim 9, the specification does not adequately provide support for the phrase "first circuitry operable..." (line 2) and "second circuitry operable..." In response to this objection, the applicant should clearly point out on the record what is regarded as the "data circuitry" as set forth in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2, 4-6, 9, 10, 12-14, 17, 18, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brook (US 2002/0038320), in view of Call (US 2002/0143521).

7. Regarding claim 1, Brook teaches a method for "retrieving a data value from a character stream" by processing a text stream and obtaining information for each character in the data (text) stream (p. 9, para. 227, lines 1-5 and 231, lines 1-4). Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters by location (i.e. an array). However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016). Brook teaches the use of the computer language XML (p. 9, para. 227).

8. Regarding claim 2, the same rationale as utilized in the rejection of claim 1 applies equally as well to claim 2, wherein Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters. However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in

combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016).

9. Regarding claim 4, Brook and Call teach on the aspect of wherein if the logical corresponds to a logically "TRUE" value, said data value represents a valid character (Brook, p. 10, para. 237, comparison against schema).

10. Regarding claim 5, Brook and Call teach on the aspect of further comprising if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream (Brook, para. 237, ll. 6-15).

11. Regarding claim 6, Brook and Call teach on this aspect in view of the above rejection of claims 1 and 2 wherein Call teaches the use of the data structure being an array (see Call, p. 2, para. 0016).

12. Regarding claim 9, Brook teaches a data processing system for "retrieving a data value from a character stream" by processing a text stream and obtaining information for each character in the data (text) stream (p. 9, para. 227, lines 1-5 and 231, lines 1-4). Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters by location (i.e. an array). However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character

validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016). Brook teaches the use of the computer language XML (p. 9, para. 227).

13. Regarding claim 10, the same rationale as utilized in the rejection of claim 9 applies equally as well to claim 10, wherein Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters. However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016).

14. Regarding claim 12, Brook and Call teach on the aspect of wherein if the logical corresponds to a logically "TRUE" value, said data value represents a valid character (Brook, p. 10, para. 237, comparison against schema).

15. Regarding claim 13, Brook and Call teach on the aspect of further comprising if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream (Brook, para. 237, ll. 6-15).

16. Regarding claim 14, Brook and Call teach on this aspect in view of the above rejection of claims 1 and 2 wherein Call teaches the use of the data structure being an array (see Call, p. 2, para. 0016).

17. Regarding claim 17, Brook teaches a computer program product embodied in a machine-readable storage medium for "retrieving a data value from a character stream" by processing a text stream and obtaining information for each character in the data (text) stream (p. 9, para. 227, lines 1-5 and 231, lines 1-4). Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters by location (i.e. an array). However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016). Brook teaches the use of the computer language XML (p. 9, para. 227).

18. Regarding claim 18, the same rationale as utilized in the rejection of claim 17 applies equally as well to claim 18, wherein Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters. However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016).

One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016).

19. Regarding claim 20, Brook and Call teach on the aspect of wherein if the logical corresponds to a logically "TRUE" value, said data value represents a valid character (Brook, p. 10, para. 237, comparison against schema).

20. Regarding claim 21, Brook and Call teach on the aspect of further comprising if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream (Brook, para. 237, ll. 6-15).

21. Regarding claim 22, Brook and Call teach on this aspect in view of the above rejection of claims 1 and 2 wherein Call teaches the use of the data structure being an array (see Call, p. 2, para. 0016).

22. Claims 7-8, 15-16 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brook and Call in view of Zhao et al. (US 2002/0042707 A1), hereinafter referred to as Zhao.

23. Regarding claims 7 and 8, Brook teaches the use of a wide range of fonts and styles but does not explicitly disclose the use of extensible markup language (XML) syntax. However Zhao teaches the analysis and format determination of extensible markup language (XML) (see fig. 6, grammar packaging). At the time of the applicant's invention, it would have been obvious

to one of ordinary skill in the art to modify Brook's method to allow it to process XML documents as input, as taught by Zhao. It logically follows that the rules employed by Brook's character validation would be in accordance with extensible markup language (XML) also. The motivation for doing so would have been to be able to determine whether extensible markup language (XML) packets match the extensible markup language (XML) protocol definition at an increased speed over prior methods. Therefore it would have been obvious to combine Brook, Call and Zhao for the benefit of increased processing speed to obtain the invention as specified in claims 7-8.

24. Regarding claims 15 and 16, Brook teaches the use of a wide range of fonts and styles but does not explicitly disclose the use of extensible markup language (XML) syntax. However Zhao teaches the analysis and format determination of extensible markup language (XML) (see fig. 6, grammar packaging). At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify Brook's method to allow it to process XML documents as input, as taught by Zhao. It logically follows that the rules employed by Brook's character validation would be in accordance with extensible markup language (XML) also. The motivation for doing so would have been to be able to determine whether extensible markup language (XML) packets match the extensible markup language (XML) protocol definition at an increased speed over prior methods. Therefore it would have been obvious to combine Brook, Call and Zhao for the benefit of increased processing speed to obtain the invention as specified in claims 15-16.

25. Regarding claims 23 and 24, Brook teaches the use of a wide range of fonts and styles but does not explicitly disclose the use of extensible markup language (XML) syntax. However

Zhao teaches the analysis and format determination of extensible markup language (XML) (see fig. 6, grammar packaging). At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify Brook's method to allow it to process XML documents as input, as taught by Zhao. It logically follows that the rules employed by Brook's character validation would be in accordance with extensible markup language (XML) also. The motivation for doing so would have been to be able to determine whether extensible markup language (XML) packets match the extensible markup language (XML) protocol definition at an increased speed over prior methods. Therefore it would have been obvious to combine Brook, Call and Zhao for the benefit of increased processing speed to obtain the invention as specified in claims 23-24.

26. Regarding claim 25, Brooks teaches a character validation method comprising the steps of: retrieving a data value from a character stream (p. 9, para. 227, lines 1-5 and 231, lines 1-4). Brook teaches on performing a validity test on each character in the stream but does not clearly recite the explicit use of a data structure to store the characters by location (i.e. an array). However, in related art, Call teaches on this aspect. Call teaches the use of a data structure, an array, to store and index using integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016). Brook teaches the use of a wide range

of fonts and styles but does not explicitly disclose the use of extensible markup language (XML) syntax. However Zhao teaches the analysis and format determination of extensible markup language (XML) (see fig. 6, grammar packaging). At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify Brook's method to allow it to process XML documents as input, as taught by Zhao. It logically follows that the rules employed by Brook's character validation would be in accordance with extensible markup language (XML) also. The motivation for doing so would have been to be able to determine whether extensible markup language (XML) packets match the extensible markup language (XML) protocol definition at an increased speed over prior methods. Therefore it would have been obvious to combine Brook, Call and Zhao for the benefit of increased processing speed to obtain the invention as specified. Brook, Call and Zhao teach on the aspect of further comprising if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream (Brook, para. 237, ll. 6-15).

27. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brook, Call and Zhao in view of Jurion et al. (US 6,631,501 B1), hereinafter referred to as Jurion.

28. Regarding claims 26-29, the combination of Brook, Call and Zhao as outlined in the above rejections teaches upon the aspects of character stream parsing and performing validity tests upon the parsed characters but does not clearly teach upon the aspect wherein the parsed characters are tested to be "base" characters, "digit" characters and "extender" characters. While Brook, Call and Zhao do teach upon the usage of characters in general, nothing is explicitly recited to classify these characters into general groups (i.e. base, digit and extender). However, in related art, Jurion teaches the automatic and replacement of characters wherein characters are

tested on their validity within a group or string of characters to determine whether a character within the string is appropriate, or valid. Jurion teaches that the characters analyzed can be of a plurality of different types of characters which would implicitly include "base" characters, "digit" characters, and "extender" characters as claimed by applicant and therefore one of ordinary skill in the art at the time of the applicant's invention would have found it obvious to test the validity of characters utilizing aspects taught by Jurion, specifically the use of base, digit, and extender characters (col. 3, lines 8-18). One of ordinary skill in the art would have been motivated to utilize the teachings of Jurion in combination with the teachings of Brook, Call, and Zhao in order to check the syntactical rules of character streams correctly and efficiently as provided by Jurion as a necessary need in the art of simple character validation (see Jurion, col. 2, ll. 41-52).

Response to Arguments

29. Applicant's arguments filed 18 December 2007 have been fully considered but they are not persuasive.

Claims 1-2, 4-9, 10, 12-18 and 20-25

30. Applicant argues with respect to exemplary claim 1 that none of the cited references teaches or suggests the feature of "determining a validity of a character represented by said data value by locating a member of a data structure, said member having a direct correspondence to said data value, wherein said validity is determined according to a logical combination of a plurality of status values in said member of said data structure, wherein the determining step determines the data value's validity as a character within a given computer language." The examiner respectfully disagrees with the applicant. Taking broadest reasonable interpretation of

the claim language, it is best understood that a character's validity within a given computer language is determined based on a logical combination made with at least one of a plurality of status values. The combination of Brook and Call teach on this limitation's aspects wherein Brook is relied upon for teaching validity testing in paragraph 0231 on page 9 wherein Brook teaches the parsing of a stream of characters, in this case a stream of XML characters, and the characters are tested for well-formedness which is deemed within the scope of the broadly claimed "validity" test. The XML language is within the scope of applicant's claimed computer language. Call is relied upon for teaching on the aspect of utilizing a data structure to store characters by location (i.e. an array) as taught on page 2, paragraph 0016. As mentioned in the rejection, one of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize a data structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. Therefore, claims 1, 9 and 17 and their respective dependent claims are not deemed patentable over the prior art of record.

Claims 26-29

31. Applicant argues with respect to dependent claim 26 that the cited prior art does not disclose or suggest "said first status value indicates whether said data value is a valid base character, said second status value indicates whether said data value is a valid digit character, and a third status value indicates whether said data value is a valid extender character." The examiner respectfully disagrees and maintains the rejection set forth above. Specifically, Applicant's arguments with respect to claims 25 and 26 wherein the applicant argues that the examiner has failed to properly establish a prima facie showing of obviousness with respect to

claims 25 and 26 has been considered but is moot in view of the new ground(s) of rejection. As set forth above, it has been established that Brook, Call and Zhao do teach upon the usage of characters in general, however they do not explicitly recite to classify these characters into general groups (i.e. base, digit and extender). However, in related art, Jurion teaches in column 3, lines 8-18 the automatic replacement of characters wherein characters are tested on their validity within a group or string of characters to determine whether a character within the string is appropriate, or valid. Jurion teaches that the characters analyzed can be of a plurality of different types of characters which would implicitly include "base" characters, "digit" characters, and "extender" characters as claimed by applicant and therefore one of ordinary skill in the art at the time of the applicant's invention would have found it obvious to test the validity of characters utilizing aspects taught by Jurion, specifically the use of base, digit, and extender characters. Therefore, dependent claims 26-29 are not found to be patentable over the cited prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

baa

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER